

## **AMENDMENTS TO THE CLAIMS**

The following listing of claims will replace all prior versions and listings of claims in the application.

### **LISTING OF CLAIMS**

1. (Currently Amended) An antenna apparatus comprising:  
a ground member having a length along a predetermined directional axis, the length being about a quarter or more of a wavelength of an electromagnetic wave used for communication; and  
an antenna element extending in a direction substantially orthogonal to the directional axis and connected to the ground member;  
wherein the antenna element is disposed substantially in the same plane as an end portion of the ground member with a predetermined distance provided therebetween.
2. (Cancelled)
3. (Original) The antenna apparatus according to Claim 1, wherein:  
the antenna element comprises an antenna element main body and a feeder terminal; and  
the antenna element main body and the feeder terminal cooperatively form a 1/4-wavelength inverted F antenna.
4. (Original) The antenna apparatus according to Claim 1, wherein:  
the ground member further comprises a shielding member for shielding an electronic circuit.

5. (Original) The antenna apparatus according to Claim 1, wherein:  
the ground member and the antenna element further comprise one piece.
6. (Original) A printed wiring board comprising:  
a ground member having a length along a predetermined directional axis, the length being about a quarter or more of a wavelength of an electromagnetic wave used for communication; and  
an antenna element extending in a direction substantially orthogonal to the directional axis and connected to the ground member;  
wherein the ground member and the antenna element are printed wirings.
7. (Original) The printed wiring board according to Claim 6, wherein:  
the antenna element is disposed substantially in the same plane as an end portion of the ground member with a predetermined distance provided therebetween.
8. (Original) The printed wiring board according to Claim 6, wherein:  
the antenna element comprises an antenna element main body and a feeder terminal, and  
the antenna element main body and the feeder terminal cooperatively form a 1/4-wavelength inverted F antenna.
9. (Original) The printed wiring board according to Claim 6, wherein:  
the ground member and the antenna element further comprise one piece.

10. (Currently Amended) A printed circuit board comprising:  
a printed wiring board;  
an electronic circuit disposed on the printed wiring board;  
a ground member having a length along a predetermined directional axis, the length being about a quarter or more of a wavelength of an electromagnetic wave used for communication; and  
an antenna element extending in a direction substantially orthogonal to the directional axis and connected to the ground member;  
wherein the antenna element is disposed substantially in the same plane as an end portion of the ground member with a predetermined distance provided therebetween.
11. (Cancelled)
12. (Original) The printed circuit board according to Claim 10, wherein:  
the antenna element comprises an antenna element main body and a feeder terminal, and  
the antenna element main body and the feeder terminal cooperatively form a 1/4-wavelength inverted F antenna.
13. (Original) The printed circuit board according to Claim 10, wherein:  
the antenna element and the ground member further comprise one piece.

14. (Original) The printed circuit board according to Claim 10, wherein:  
the antenna element further comprises a printed wiring on the printed wiring board; and  
the ground member is a separate component from the printed wiring board.
15. (Original) The printed circuit board according to Claim 13, wherein:  
the ground member further comprises a shielding member for shielding the electronic circuit.
16. (Original) The printed circuit board according to Claim 15, further comprising:  
a ground pattern formed on the printed wiring board and electrically connected to the ground member.
17. (Original) The printed circuit board according to Claim 10, wherein:  
the antenna element and the ground member further comprise printed wirings on the printed wiring board.
18. (Original) A communication adapter comprising:  
a printed wiring board;  
an electronic circuit disposed on the printed wiring board;  
a ground member having a length along a predetermined directional axis, the length being about a quarter or more of the wavelength of an electromagnetic wave used for communication;  
an antenna element extending in a direction substantially orthogonal to the directional axis and connected to the ground member; and  
a connector connection terminal;

wherein the connector connection terminal is disposed on a side toward which an antenna element main body of the antenna element extends in relation to the printed wiring board.

19. (Original) The communication adapter according to Claim 18, wherein:  
the antenna element further comprises a feeder terminal, and  
the antenna element main body and the feeder terminal cooperatively form an inverted F antenna.

20. (Original) Portable electronic equipment comprising the antenna apparatus according to Claim 1.

21. (Original) The portable electronic equipment according to Claim 20, wherein the portable electronic equipment further comprises a wrist watch.

22. (Original) The printed circuit board according to Claim 14, wherein:  
the ground member further comprises a shielding member for shielding the electronic circuit.

23. (Original) The printed circuit board according to Claim 22, further comprising:  
a ground pattern formed on the printed wiring board and electrically connected to the ground member.